

METHOD AND DEVICE FOR MONITORING MOISTURE RELATED
OPERATING CONDITION OF AN IMMERSED SOLID DIELECTRIC MATERIAL

ABSTRACT OF THE DISCLOSURE

- 5 A method and device for monitoring, within an enclosure, moisture content level of a solid dielectric material, or paper, immersed in a dielectric fluid, or oil, both of which having respective moisture content, and known water solubility properties varying with temperature, and a corresponding bubble formation temperature. The device includes a moisture detector and a temperature detector for
- 10 measuring the oil moisture content and temperature levels, respectively. A microprocessor, electrically connected to both the moisture and the temperature detectors, has the known water solubility properties of the paper and the oil stored therein along with the oil gas content level and the enclosure pressure related data and processes the oil moisture content level and the oil temperature
- 15 level so as to determine the paper moisture content level and the bubble temperature. The latter being displayed on a display connected to the microprocessor.